

# Memorandum

**TO:** Laurel Prevetti  
PBCE

**FROM:** Timm Borden  
Public Works

**SUBJECT: COMMENTS ON CVSP  
COMPOSITE CORE PLAN  
AND WORKBOOK**

**DATE:** 07-22-04

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Public Works submits the following comments on the Composite Core Plan received on 7/7/04 and the Land Use and Urban Form Concepts Workbook received on 6/24/04. While the comments are very general, they are applicable to the concepts conveyed in the plan. More detailed comments will be provided as particular focus on the many subject areas is analyzed.

## **Transportation/Geometric Design Comments:**

1. Prior to the start of any geometric design, the traffic and/or a Transportation Planning consultant shall perform a comprehensive transportation analysis to determine the Project's trip generation and number of gateways required to serve the proposed development. A multi-modal transportation system including transit and bike/ped circulation should be developed based on the analysis.
2. Since the parkway "merge and loop" and roundabouts concepts are very different from the standard signalized intersection and CEQA LOS thresholds, the traffic consultant should propose a methodology to analyze the entire system's LOS. Ultimately, a subarea policy will be necessary for the specific plan area.
3. The proposed parkway "merge and loop" and roundabouts are ideal for a two-lane or a four-lane roadway. If six-lane facilities are required, the proposed parkways and roundabouts may not be ideal because of safety concerns for pedestrians and bicyclists. This will need to be addressed if pursued further.
4. Bailey Ave. and Santa Teresa Blvd. are no longer intersecting due to the proposed Lake. Address how the traffic previously projected at this very high-volume intersection will be accommodated? The traffic consultant should address this concern prior to start of any geometric design.
5. The proposed Parkways, "merge and loop", roundabouts, and other major roadway systems shall conform to "Highway Design Manual" by Caltrans, "A Policy on Geometric Design of Highways and Streets" by AASHTO, and "Roundabouts: An Informational Guide" by FHWA. For example, horizontal and vertical alignment shall meet the design speed and minimum radius requirements. The proposed "merge and loop" shall meet the required weaving and merging distance.
6. The roadway concept appears to have significant challenges to meet these design criteria. For example, the diagram for the proposed overpass crossings at Monterey Road @ Coyote

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Valley Parkway and at Coyote Creek Golf Drive does not show adequate weaving and merging distances.

The entire roadway system should be designed so it is safe, efficient and well connected with proper roadway hierarchy (ie. Parkway, arterial, collector and neighborhood streets). The system seems to be random and without strategy with regard to traffic and bike/ped circulation. Staff strongly recommends that the Architect work closely with the Civil and Transportation Planning consultants to develop a plan that will properly serve this new community.

7. A more detailed roadway geometric design and layout should be provided for further review and comment. For example, show number of lanes, horizontal curve radius, indicate if a street is one-way or two-way, and any indicate proposed traffic or pedestrian signal locations.
8. Provide more detailed design of pedestrian and bicycle paths along the proposed parkways, roundabouts overpass and underpass crossings. Staff does not recommend at-grade crossings for pedestrians at uncontrolled intersections.
9. The Composite Core Plan and the cost estimates shall incorporate the Bailey over the Hill connection and as well as a tie-in with VTA's proposed LRT extension along Santa Teresa Blvd. The current Plan cannot accommodate the future LRT system.
10. The proposed spoke transit system may not be ideal for a community of this magnitude.
11. The cost estimates to be developed based on the current Composite Core Plan may be significantly off by large factors, because major transportation improvements may be required pending the results of traffic modeling. Also, as indicated previously, the proposed Parkways and roundabouts may not be appropriate if six- or eight-lane roadways are required.

**Geology Comments:**

12. The geotechnical diagram, page 7 of Workbook Section I, should reflect the Cooper Clark Associates (1974) Geotechnical maps, which form the basis for the City's Seismic Safety Element, and the Santa Clara County Geologic Hazard maps. Specifically, the Cooper Clark fault trace maps show a trace of the potentially active Shannon fault crossing the site. This fault trace is zoned for Special Studies on the Copper Clark map and is also designated as a Santa Clara County "Dr" fault rupture hazard zone.

Also, the State of California Seismic Hazard Zone (preliminary Morgan Hill Quadrangle Map) and the City's Geologic Hazard Zone boundaries should be shown.

13. Contrary to recommendations from the Preliminary Geotechnical Evaluation by Engeo dated 6/14/04, before Staff can conclude on the feasibility of the Composite Core Plan, a fault study will be required. Currently, the plan assumes that the fault does not exist without any physical analysis. If fault study is deferred to a later date (ie. PD permit stage) and the results

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indicates it does exist, this may significantly impact the proposed land use through setback requirements.

14. The Composite Core Plan needs to reflect the existing 50-foot building setback zone north of Bailey Ave. and west of Santa Teresa, which is on the IBM property. Please refer to the Preliminary Geotechnical Evaluation for more detail.

**Storm/Sanitary Comments:**

15. The Composite Core Plan demonstrates numerous opportunities to implement the Provision C.3 storm water requirements for post-construction treatment control and storm water volume detention. The Plan should also propose treatment and pollutant reduction for internal minor and neighborhood streets, which may have potential impact to the land use. School playgrounds and parks should also be designed to serve multipurpose functions of treatment and volume control. Address proposed cross-section of parkways for median and shoulder drainage. Also, address typical cross-section and drainage for roundabouts.
16. The City has recently constructed a sanitary sewer concrete junction structure at the intersection of Bailey and Santa Teresa to mitigate approximately 1 million gallons per day of groundwater infiltration. The cost of the project was approximately \$1M including dewatering because of the high water table. With the proposed lake design, this structure and a portion of sanitary line will need to be relocated and realigned. This will not only be a challenging engineering design, but will be costly.
17. In areas of a high ground water table (where the ground water table is above the sanitary sewer) sanitary sewers shall not be constructed utilizing traditional vitrified clay pipe. Pressure class PVC or HDPE will be required for the sanitary sewer system throughout these areas. Lateral connections shall be achieved using factory fittings. Tapping into the main will not be allowed. In addition, manholes will be required to be constructed in a manner which will not propagate infiltration. Current acceptable manhole construction in high ground water areas include an exterior waterproofing sheet membrane and an interior corrosion resistant epoxy coating.
18. Currently the Edenvale Sanitary Sewer Phase V Project is being designed with construction scheduled to be completed in the Fall of 2008. The Edenvale project is designed to provide the additional sanitary capacity for the future development of the Coyote Valley. The ultimate proposed development of this area require the Edenvale project to be operational prior to ultimate build out.

The consultant shall prepare a hydraulic analysis for the proposed development. This analysis shall include the average and peak anticipated discharge for the planned development.

Laurel Prevetti

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**Other Comments:**

19. The bridge and interchange at Bailey and Monterey is currently under construction (The cost is approx. \$5M). This structure may need to be re-constructed with the proposed overpass crossing. Also, the bridge structure over US101/Coyote/Bailey may be impacted as well.

Additionally, Coyote Creek, sensitive wetland and County parkland area may be further impacted with this plan. As a general comment, certainly some wetland mitigation areas will be generated through this concept and a rough balance of impacts and mitigations should be addressed.

20. The Composite Core Plan should identify a location for a recycle water treatment facility and any other potable water facilities. Please refer to ESD for additional comments.

21. Due to the remote location and the amount of special features and intensive public maintenance requirements, the DOT may desire to explore a site for a Corporation Yard. Please refer to DOT for further comments.

If you have any questions, please call me at extension 3236 or Winnie Pagan at extension 5161.



Timm Borden  
Deputy Director of Public Works